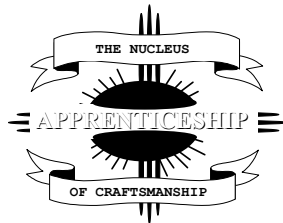




**STANDARDS OF APPRENTICESHIP  
adopted by**

**SEATTLE MARINE ELECTRICAL WORKERS APPRENTICESHIP COMMITTEE**

<u>Skilled Occupational Objective(s):</u>	(sponsor)	<u>DOT</u>	<u>Term</u>
MARINE ELECTRICIAN		825.381-030	6000 HOURS



**APPROVED BY**  
**Washington State Apprenticeship and Training Council**  
**REGISTERED WITH**  
**Apprenticeship Section of Specialty Compliance Services Division**  
Washington State Department Labor and Industries  
Post Office Box 44530  
Olympia, Washington 98504-4530

**APPROVAL:**

APRIL 15, 1982

Initial Approval

By: MELINDA NICHOLS  
Chairman of Council

OCTOBER 17, 1997

Addendum Amended

By: ERNIE LAPALM  
Secretary of Council

OCTOBER 17, 1997

Committee Amended

## SEATTLE MARINE ELECTRICAL WORKERS APPRENTICESHIP COMMITTEE

NOTE: THE FOLLOWING ADDENDUM SHALL BE SPECIFIED TO THE INDIVIDUAL JOINT APPRENTICESHIP AND TRAINING COMMITTEE AND ITS CRAFTS:

The following Standards of apprenticeship, Seattle Marine Electrical Workers, with supplements pertaining to the necessary work experience of the trade and a progressive wage scale, approved by and registered with the Registration Agency, govern the training of apprentices in this industry.

1. GEOGRAPHICAL AREA COVERED:

The area covered by these Standards shall be King, Jefferson, Kitsap, and Clallam Counties in the State of Washington.

2. MINIMUM QUALIFICATIONS:

AGE:	Must be 18 years of age.
EDUCATION:	Must be high school graduate or G.E.D. and one (1) year of algebra.
PHYSICAL:	Must be able to perform work of the trade.
TESTING:	S72R and receive a grade of "HIGH".
OTHER:	Must provide copy of birth certificate.

3. CONDUCT OF PROGRAM UNDER WASHINGTON EQUAL EMPLOYMENT OPPORTUNITY PLAN:

A. Selection Procedures:

1. The applicant will sign the "Record of Apprentice Applicants" form and will be given an "Application for Apprenticeship."
2. Upon completing the application, the applicant will be instructed to take the appropriate aptitude test, S72R, the results of which will be forwarded to the Apprenticeship Committee, Secretary, Chairman, or Coordinator.
3. The applicant will be instructed to request an official, sealed transcript of all high school records and grades. Post secondary school records and grades may also be presented. Applicants with GED equivalents must present results of GED tests. The above will be forwarded to the Apprenticeship Committee Secretary or Coordinator.
4. When these steps have been completed and noted on the "Register of Applicants" form, the applicant will be notified when to appear before the Apprenticeship Committee for interview, evaluation and scoring. Anyone scoring less than seventy (70%) percent shall not be acceptable into apprenticeship and will be so notified. Anyone scoring seventy (70%) percent or above shall be placed on a list to await employment

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opportunity. Applications will be valid for one (1) year. Any applicants not put to work within one (1) year of date of interview may reapply for consideration in the following year.

5. If the above steps have not been completed within 60 days the application will be placed in an inactive file, and requiring reapplication for further consideration.
6. Signing your name in the "Apprentice Application Record Book" the applicant acknowledges that he/she has received the instructions and conditions for completing the application.

### **B. Affirmative Action Plan:**

The Apprenticeship Committee has pledged that the recruitment, selection, employment, and training of apprentices during their apprenticeship shall be without discrimination because of race, color, religion, national origin, or sex. In order to promote equality of opportunity, the Apprenticeship Committee hereby pledges to take affirmative action to encourage minorities and women to complete the apprenticeship application and enter into the eligibility pool.

1. Dissemination of information concerning the nature of apprenticeship requirements for admission to apprenticeship, availability of apprenticeship opportunities, sources of apprenticeship applications, and the equal opportunity policy of the sponsor.

Such information shall be given to the council, local schools, employment service offices, women's centers, Outreach programs and community organizations which can effectively reach minorities and women in the local area in which the program sponsor operates.

2. Participate in workshops conducted by employment service agencies for the purpose of familiarizing school, employment service and other appropriate personnel with the apprenticeship system and current opportunities therein.
3. Internal communication of sponsor's equal opportunity policy in such a manner as to foster understanding, acceptance, and support among the sponsor's various officers, supervisors, employers, and members and to encourage such persons to take the necessary action to aid the sponsor in meeting its obligations under these rules.
4. Utilization of journeyman to assist in the implementation of the Sponsor's Affirmative Action Program.

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5. Granting advance standing or credit on the basis of previously acquired experience, training skills, or aptitude for all applicants equally.

4. TERM OF APPRENTICESHIP:

The term of apprenticeship for Marine Electrician shall be 6000 hours of reasonably continuous employment.

5. PROBATIONARY PERIOD:

All apprentices shall be subject to a probationary period not exceeding the first 1000 hours of employment.

6. RATIO OF APPRENTICES:

One (1) apprentice may be employed after three (3) journeymen are employed and one (1) additional apprentice may be employed for each seven (7) journeymen steadily employed thereafter.

7. WAGE PROGRESSION:

Apprentices shall be paid on the following percentage basis in accordance with WAC 296-04-270(2)(c)

1st 1000 hours 70% of journeyman's rate

2nd 1000 hours 75% of journeyman's rate

3rd 1000 hours 80% of journeyman's rate

4th 1000 hours 85% of journeyman's rate

5th 1000 hours 90% of journeyman's rate

6th 1000 hours 95% of journeyman's rate

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8. WORK PROCESSES:

A. Marine Electrician: D.O.T. #825.381-030

Hours

1. First Year:

- a. Electric shop .....300
  - 1. Use blueprints to construct electrical foundations
  - 2. Use vertical and horizontal power bandsaws
  - 3. Use various grinders and shapers
  - 4. Use power drills
  - 5. Use power punches and other specialized power equipment
  - 6. Learn foundations-and the particular problems in constructing them
  - 7. Learn repair of electrical boxes
- b. Material runner .....300
  - 1. Process and understand material paperwork
  - 2. Learn and work on material requirements for ship areas
  - 3. Learn material parts, names, symbol numbers, etc.
  - 4. Learn and maintain material flow
  - 5. Learn proper handling and care of electrical material
- c. TLI (Ship ways) .....350
  - 1. Know proper tank indicator placement and be able to install
  - 2. Know location and kinds of ship tanks
  - 3. Layout and install wireways to TLI's
  - 4. Work with welders installing brackets, wireways, etc.
  - 5. Learn basic ship construction techniques
- d. Main wireways.....350
  - 1. Learn to read blueprints, abbreviations, symbols, etc.
  - 2. Layout wireways by working from drawings
  - 3. Weld wireways working from prints using proper material
  - 4. Layout and install transits, tubes and collars from prints.

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e.	Cable crew .....	350
1.	Learn proper method to pull ship's cable, know radiuses, breakouts, etc.	
2.	Learn ship's sections and transits	
3.	Band cable runs, pack tubes and transits	
4.	Identify and tag cables	
5.	Learn and work with different types of cables	
f.	Foundation crew .....	350
1.	Learn blueprint reading	
2.	Layout all areas of ship	
3.	Learn different foundations	
4.	Install foundations	
2.	<u>Second Year:</u>	
a.	Main switchboard power distribution .....	500
1.	Learn power generation. Work generator hookup	
2.	Learn power distribution (shore power)	
3.	Learn main and alternate power feed (MBTs, ABTs)	
4.	Dress and install large cable throughout	
5.	Work degaussing system	
b.	Power, lighting, phones, announcing.....	1000
1.	Install equipment	
2.	Layout and install local wireways and cable	
3.	Correlate between blueprints	
4.	Hook up equipment	
5.	Learn special procedures peculiar to your area	
c.	Temporary light .....	500
1.	Work temporary light shop, repair cables and equipment	
2.	Work on ship with temporary lighting	
3.	Power distribution to weld machinery and temporary ventilation	
3.	<u>Third Year:</u>	
a.	Weapons systems .....	134
b.	Communications Center.....	133
c.	Combat information center .....	133

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d.	Propulsion system .....	700
1.	Install junction boxes	
2.	Layout and install susceptible cable runs	
3.	Cut in and hook up cables	
4.	Coordinate with other systems	
e.	Test crew, IC test, propulsion test, power lighting test .....	500
1.	Use electronic test equipment	
2.	Follow test memos for equipment or system test	
3.	Make corrections on equipment to complete test	
<b>TOTAL HOURS:</b>		<b>6000</b>

ALL OF THE FOREGOING WORK EXPERIENCE AS HEREIN NOTED IS UNDERSTOOD  
TO MEAN AS IT PERTAINS TO THE TRADE HEREIN INVOLVED IN THESE  
STANDARDS

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### 9. RELATED/SUPPLEMENTAL INSTRUCTION:

- A. Each apprentice shall enroll in and attend classes in subjects related to this trade as approved by the State Board for Community and Technical Colleges, for a minimum of 144 hours per year.
- B. The methods of related/supplemental instruction training shall consist of one or more of the following:
  - ☐ Supervised field trips
  - ☐ Approved training seminars
  - ☐ A combination of home study and approved correspondence courses of equivalent value
  - ☒ Technical College
  - ☒ Community College
  - ☒ Training trust
  - ☐ Other (specify)
- C. Hours 144+
- D. Satisfactory progress must be maintained in related training classes. (See Section 10, Administrative/Disciplinary Procedures.)
- E. Each apprentice shall enroll in and attend classes in subjects related to the trade for not less than six (6) hours per week for three (3) years.
  - 1. Related Instruction shall be a minimum of six (6) hours per week for three (3) years.
  - 2. The Apprenticeship Committee recommends that the course for apprentices under these Standards be limited to those who are actually apprentices in the trade in accordance with these Standards.
  - 3. Safety training will be given in the related classes so that each apprentice will be fully informed on safety practices.
  - 4. An examination of each apprentice's record shall be made before each period of advancement by the Apprenticeship Committee. In this examination, consideration shall be given to the school attendance, progress, attitude and daily employment of the apprentice.
  - 5. Apprentice must immediately notify the instructor of any intended absence from night school classes and must also notify the Coordinator by mail, stating the date and reason for absence. Failure to do so will mean the absence is unexcused. Sickness will be considered an acceptable excuse when the apprentices missed time from work. Overtime work shall not be



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considered as an excuse for absence from night school. The Apprenticeship Committee, at their discretion, will examine the absence excuses so to determine if the excuse is satisfactory. Unexcused absences shall be adequate reason for the apprentice to be called before the Apprenticeship Committee for disciplinary action.

6. Absences during vacation shall be excused if Coordinator and Instructor of night classes are notified at least two (2) weeks in advance of vacation.
7. Failure to receive passing grades in school will be cause for disciplinary action.
8. Any time that the apprentice believes he/she has any complaint concerning any phase of the training, he/she shall submit the complaint in writing to the Apprenticeship Committee, through the Coordinator fifteen (15) days prior to the next regular meeting.
9. All requests of the Apprenticeship Committee shall be presented to the Coordinator at least ten (10) days in advance of the next Apprenticeship Committee meeting, or as otherwise stated in this policy. Any apprentice desiring to make a request for credit for previous "on-the-job" training must do so within six (6) months after being accepted into the Apprenticeship Program. Without satisfactory proof of such training, no apprentice shall be given credit for previous work experience. This request shall include a written resume' of his/her previous work experience and training schedule as is related to the trade.

### 10. ADMINISTRATIVE/DISCIPLINARY PROCEDURES:

- A. In view of the fact that there are a few exceptional apprentices who have above average ability and diligence in their apprenticeship and who have cooperated to the utmost with the program, the Apprenticeship Committee, in trying to be completely fair, will make the following special dispensation as is related to taking the journeyman's examination:
- B. Termination:
  1. An employer will not terminate an apprentice unless for just cause, and having advised the Apprenticeship Coordinator in advance.
  2. An apprentice will not terminate from an employer without the sanction of the Apprenticeship Committee. If such termination without sanction should occur, the apprentice shall be subject to disciplinary action.

### 11. COMPOSITION OF COMMITTEE AND ALTERNATES:

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The Marine Electrical Apprenticeship Committee shall be composed of members representing the employers and an equal number of members representing the International Brotherhood of Electrical Workers Local Union No. 46. The selection of these individual members will be made by the groups they represent.

### The Employer Representatives Shall Be:

Larry Wright, Chairman  
Todd Shipyard  
1801 16th Ave., SW  
Seattle, WA 98124

Marty Hart  
Lake Union Dry Dock Co.  
1515 Fairview Ave. East  
Seattle, WA 98102

### The Employee Representatives Shall Be:

Clyde Bauer, Secretary  
Todd Shipyard  
1801 16th Ave., SW  
Seattle, WA 98124

Richard Harlow  
Todd Shipyard  
1801 16th Ave., SW  
Seattle, WA 98124

12. SUBCOMMITTEE: (None)

13. TRAINING DIRECTOR/COORDINATOR:

There will be an apprentice Coordinator, whose job it will be to coordinate the program. He/she shall report to and be governed by the Apprenticeship Committee. He/she shall have a voice, but no vote in the Committee decisions. The Coordinator is:

John Tobey, Coordinator  
2700 - 1st Avenue  
Seattle, WA 98121